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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/047,990

DATE: 08/27/2002

TIME: 10:51:37

Input Set : A:\hpvseq.txt

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3 <110> APPLICANT: GASTON ET AL
 5 <120> TITLE OF INVENTION: Methods of Inducing Cell Death
 7 <130> FILE REFERENCE: WIRO:016US
 9 <140> CURRENT APPLICATION NUMBER: 10/047,990
10 <141> CURRENT FILING DATE: 2002-01-14
12 <160> NUMBER OF SEQ ID NOS: 8
14 <170> SOFTWARE: PatentIn Ver. 2.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 365
18 <212> TYPE: PRT
19 <213> ORGANISM: Human papillomavirus
21 <400> SEQUENCE: 1
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25 Thr His Tyr Glu Asn Asp Ser Thr Asp Leu Arg Asp His Ile Asp Tyr
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                 20
                                     25
                                                          30
28 Trp Lys His Met Arg Leu Glu Cys Ala Ile Tyr Tyr Lys Ala Arg Glu
29
             35
                                 40
                                                      45
31 Met Gly Phe Lys His Ile Asn His Gln Val Val Pro Thr Leu Ala Val
        50
32
                             55
                                                  60
34 Ser Lys Asn Lys Ala Leu Gln Ala Ile Glu Leu Gln Leu Thr Leu Glu
                         70
                                             75
37 Thr Ile Tyr Asn Ser Gln Tyr Ser Asn Glu Lys Trp Thr Leu Gln Asp
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40 Val Ser Leu Glu Val Tyr Leu Thr Ala Pro Thr Gly Cys Ile Lys Lys
41
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43 His Gly Tyr Thr Val Glu Val Gln Phe Asp Gly Asp Ile Cys Asn Thr
44
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46 Met His Tyr Thr Asn Trp Thr His Ile Tyr Ile Cys Glu Glu Ala Ser
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47
                            135
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49 Val Thr Val Val Glu Gly Gln Val Asp Tyr Tyr Gly Leu Tyr Tyr Val
50 145
                        150
                                            155
                                                                 160
52 His Glu Gly Ile Arg Thr Tyr Phe Val Gln Phe Lys Asp Asp Ala Glu
53
                    165
                                        170
55 Lys Tyr Ser Lys Asn Lys Val Trp Glu Val His Ala Gly Gly Gln Val
56
               180
                                    185
58 Ile Leu Cys Pro Thr Ser Val Phe Ser Ser Asn Glu Val Ser Ser Pro
59
           195
                                200
                                                    205
61 Glu Ile Ile Arg Gln His Leu Ala Asn His Pro Ala Ala Thr His Thr
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62
                            215
                                                220
64 Lys Ala Val Ala Leu Gly Thr Glu Glu Thr Gln Thr Thr Ile Gln Arg
65 225
                       230
                                            235
                                                                 240
67 Pro Arg Ser Glu Pro Asp Thr Gly Asn Pro Cys His Thr Thr Lys Leu
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70 Leu His Arg Asp Ser Val Asp Ser Ala Pro Ile Leu Thr Ala Phe Asn
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73 Ser Ser His Lys Gly Arg Ile Asn Cys Asn Ser Asn Thr Thr Pro Ile
74
            275
                                280
                                                    285
76 Val His Leu Lys Gly Asp Ala Asn Thr Leu Lys Cys Leu Arg Tyr Arg
        290
77
                            295
                                                300
79 Phe Lys Lys His Cys Thr Leu Tyr Thr Ala Val Ser Ser Thr Trp His
80 305
                        310
                                            315
                                                                 320
82 Trp Thr Gly His Asn Val Lys His Lys Ser Ala Ile Val Thr Leu Thr
83
                    325
                                        330
85 Tyr Asp Ser Glu Trp Gln Arg Asp Gln Phe Leu Ser Gln Val Lys Ile
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88 Pro Lys Thr Ile Thr Val Ser Thr Gly Phe Met Ser Ile
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94 <211> LENGTH: 1098
95 <212> TYPE: DNA
96 <213> ORGANISM: Human papillomavirus
98 <400> SEQUENCE: 2
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101 gctatttatt acaaggccag agaaatggga tttaaacata ttaaccacca agtggtgcca 180
102 acactggctg tatcaaagaa taaagcatta caagcaattg aactgcaact aacgttagaa 240
103 acaatatata actcacaata tagtaatgaa aagtggacat tacaagacgt tagccttgaa 300
104 gtgtatttaa ctgcaccaac aggatgtata aaaaaacatg gatatacagt ggaagtgcag 360
105 tttgatggag acatatgcaa tacaatgcat tatacaaact ggacacatat atatatttgt 420
106 gaagaagcat cagtaactgt ggtagagggt caagttgact attatggttt atattatgtt 480
107 catgaaggaa tacgaacata ttttgtgcag tttaaagatg atgcagaaaa atatagtaaa 540
108 aataaagtat gggaagttca tgcgggtggt caggtaatat tatgtcctac atctgtgttt 600
109 agcagcaacg aagtateete teetgaaatt attaggeage aettggeeaa eeaceeegee 660
110 gcgacccata ccaaagccgt cgccttgggc accgaagaaa cacagacgac tatccagcga 720
111 ccaagatcag agccagacac cggaaacccc tgccacacca ctaagttgtt gcacagagac 780
112 tcagtggaca gtgctccaat cctcactgca tttaacagct cacacaaagg acggattaac 840
113 tgtaatagta acactacacc catagtacat ttaaaaggtg atgctaatac tttaaaatgt 900
114 ttaagatata gatttaaaaa gcattgtaca ttgtatactg cagtgtcgtc tacatggcat 960
115 tggacaggac ataatgtaaa acataaaagt gcaattgtta cacttacata tgatagtgaa 1020
116 tggcaacgtg accaattttt gtctcaagtt aaaataccaa aaactattac agtgtctact 1080
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120 <210> SEQ ID NO: 3
121 <211> LENGTH: 365
122 <212> TYPE: PRT
123 <213> ORGANISM: Human papillomavirus
125 <400> SEQUENCE: 3
126 Met Glu Thr Leu Cys Gln Arg Leu Asn Val Cys Gln Asp Lys Ile Leu
127 1
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129 Thr His Tyr Glu Asn Asp Ser Thr Asp Leu Arg Asp His Ile Asp Tyr
130
                 20
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                                                          30
132 Trp Lys His Met Arg Leu Glu Cys Ala Ile Tyr Tyr Lys Ala Arg Glu
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135 Met Gly Phe Lys His Ile Asn His Gln Val Val Pro Thr Leu Ala Val
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                              55
138 Ser Lys Asn Lys Ala Leu Gln Ala Ile Glu Leu Gln Leu Thr Leu Glu
139 65
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                                               75
                                                                    80
141 Thr Ile Tyr Asn Ser Gln Tyr Ser Asn Glu Lys Trp Thr Leu Gln Asp
142
                      85
144 Val Ser Leu Glu Val Tyr Leu Thr Ala Pro Thr Gly Cys Ile Lys Lys
145
                 100
                                     105
                                                          110
147 His Gly Tyr Thr Val Glu Val Gln Phe Asp Gly Asp Ile Cys Asn Thr
148
             115
                                 120
                                                      125
150 Met His Tyr Thr Asn Trp Thr His Ile Tyr Ile Cys Glu Glu Ala Ser
151
        130
                             135
                                                  140
153 Val Thr Val Val Glu Gly Gln Val Asp Tyr Tyr Gly Leu Tyr Tyr Val
154 145
                         150
                                              155
                                                                  160
156 His Glu Gly Ile Arg Thr Tyr Phe Val Gln Phe Lys Asp Asp Ala Glu
157
                     165
                                         170
                                                              175
159 Lys Tyr Ser Lys Asn Lys Val Trp Glu Val His Ala Gly Gly Gln Val
160
                 180
                                     185
                                                          190
162 Ile Leu Cys Pro Thr Ser Val Phe Ser Ser Asn Glu Val Ser Ser Pro
163
            195
                                 200
                                                      205
165 Glu Ile Ile Arg Gln His Leu Ala Asn His Pro Ala Ala Thr His Thr
166
        210
                             215
                                                  220
168 Lys Ala Val Ala Leu Gly Thr Glu Glu Thr Gln Thr Thr Ile Gln Arg
169 225
                         230
                                              235
                                                                  240
171 Pro Arg Ser Glu Pro Asp Thr Gly Asn Pro Cys His Thr Thr Lys Leu
172
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                                                              255
174 Leu His Arg Asp Ser Val Asp Ser Ala Pro Ile Leu Thr Ala Phe Asn
175
                 260
                                     265
                                                          270
177 Ser Ser His Lys Gly Arg Ile Asn Cys Asn Ser Asn Thr Thr Pro Ile
178
            275
                                 280
                                                      285
180 Val His Leu Lys Gly Asp Ala Ala Thr Leu Ala Cys Leu Arg Tyr Ala
181
        290
                             295
183 Phe Lys Lys His Cys Thr Leu Tyr Thr Ala Val Ser Ser Thr Trp His
184 305
                         310
                                             315
                                                                  320
186 Trp Thr Gly His Asn Val Lys His Lys Ser Ala Ile Val Thr Leu Thr
187
                     325
                                         330
                                                              335
189 Tyr Asp Ser Glu Trp Gln Arg Asp Gln Phe Leu Ser Gln Val Lys Ile
190
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192 Pro Lys Thr Ile Thr Val Ser Thr Gly Phe Met Ser Ile
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197 <210> SEQ ID NO: 4
198 <211> LENGTH: 1098
199 <212> TYPE: DNA
200 <213> ORGANISM: Human papillomavirus
202 <400> SEQUENCE: 4
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204 aatgatagta cagacctacg tgaccatata gactattgga aacacatgcg cctagaatgt 120
205 gctatttatt acaaggccag agaaatggga tttaaacata ttaaccacca agtggtgcca 180
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206 acactggctg tatcaaagaa taaagcatta caagcaattg aactgcaact aacgttagaa 240
 207 acaatatata actcacaata tagtaatgaa aagtggacat tacaagacgt tagccttgaa 300
208 gtgtatttaa ctgcaccaac aggatgtata aaaaaacatg gatatacagt ggaagtgcag 360
209 tttgatggag acatatgcaa tacaatgcat tatacaaact ggacacatat atatatttgt 420
210 gaagaagcat cagtaactgt ggtagagggt caagttgact attatggttt atattatgtt 480
211 catgaaggaa tacgaacata ttttgtgcag tttaaagatg atgcagaaaa atatagtaaa 540
212 aataaagtat gggaagttca tgcgggtggt caggtaatat tatgtcctac atctgtgttt 600
213 agcagcaacg aagtatcctc tcctgaaatt attaggcagc acttggccaa ccaccccgcc 660
214 gcgacccata ccaaagccgt cgccttgggc accgaagaaa cacagacgac tatccagcga 720
215 ccaagatcag agccagacac cggaaacccc tgccacacca ctaagttgtt gcacagagac 780
216 tcagtggaca gtgctccaat cctcactgca tttaacagct cacacaaagg acggattaac 840
217 tgtaatagta acactacacc catagtacat ttaaaaggtg atgctgctac tttagcatgt 900
218 ttaagatatg catttaaaaa gcattgtaca ttgtatactg cagtgtcgtc tacatggcat 960
219 tggacaggac ataatgtaaa acataaaagt gcaattgtta cacttacata tgatagtgaa 1020
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224 <210> SEQ ID NO: 5
225 <211> LENGTH: 87
226 <212> TYPE: PRT
227 <213> ORGANISM: Human papillomavirus
229 <400> SEQUENCE: 5
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233 Ala Asn Thr Leu Lys Cys Leu Arg Tyr Arg Phe Lys Lys His Cys Thr
234
                  20
                                      25
                                                          30
236 Leu Tyr Thr Ala Val Ser Ser Thr Trp His Trp Thr Gly His Asn Val
237
              35
                                  40
                                                      45
239 Lys His Lys Ser Ala Ile Val Thr Leu Thr Tyr Asp Ser Glu Trp Gln
240
         50
                              55
                                                  60
242 Arg Asp Gln Phe Leu Ser Gln Val Lys Ile Pro Lys Thr Ile Thr Val
243 65
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245 Ser Thr Gly Phe Met Ser Ile
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250 <210> SEQ ID NO: 6
251 <211> LENGTH: 264
252 <212> TYPE: DNA
253 <213> ORGANISM: Human papillomavirus
255 <400> SEQUENCE: 6
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257 aaatgtttaa gatatagatt taaaaagcat tgtacattgt atactgcagt gtcgtctaca 120
258 tggcattgga caggacataa tgtaaaacat aaaagtgcaa ttgttacact tacatatgat 180
259 agtgaatggc aacgtgacca atttttgtct caagttaaaa taccaaaaac tattacagtg 240
260 tctactggat ttatgtctat atga
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263 <210> SEQ ID NO: 7
264 <211> LENGTH: 87
265 <212> TYPE: PRT
266 <213> ORGANISM: Human papillomavirus
268 <400> SEQUENCE: 7
269 Met Asn Cys Asn Ser Asn Thr Thr Pro Ile Val His Leu Lys Gly Asp
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270 1
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272 Ala Ala Thr Leu Ala Cys Leu Arg Tyr Ala Phe Lys Lys His Cys Thr
273
                 20
                                      25
                                                          30
275 Leu Tyr Thr Ala Val Ser Ser Thr Trp His Trp Thr Gly His Asn Val
276
             35
                                  40
                                                      45
278 Lys His Lys Ser Ala Ile Val Thr Leu Thr Tyr Asp Ser Glu Trp Gln
279
         50
                             55
                                                  60
281 Arg Asp Gln Phe Leu Ser Gln Val Lys Ile Pro Lys Thr Ile Thr Val
282 65
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284 Ser Thr Gly Phe Met Ser Ile
285
                     85
289 <210> SEQ ID NO: 8
290 <211> LENGTH: 264
291 <212> TYPE: DNA
292 <213> ORGANISM: Human papillomavirus
294 <400> SEQUENCE: 8
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296 gcatgtttaa gatatgcatt taaaaagcat tgtacattgt atactgcagt gtcgtctaca 120
297 tggcattgga caggacataa tgtaaaacat aaaagtgcaa ttgttacact tacatatgat 180
298 agtgaatggc aacgtgacca atttttgtct caagttaaaa taccaaaaac tattacagtg 240
299 tctactggat ttatgtctat atga
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VERIFICATION SUMMARY

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